

assemblies. Indicate design designations of specific assemblies on Drawings.

- G. STC-Rated Assemblies: For STC-rated assemblies, provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413 by an independent testing agency.

1.5 SUBMITTALS

- A. Submit under provisions of Section 01 30 00 -

- B. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.

**** NOTE TO SPECIFIER ** Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.**

- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Refinish mock-up area as required to produce acceptable work.
- D. Contractor shall provide effective, full time quality control over all fabrication and erection complying with the pertinent codes and regulations of government agencies having jurisdiction.
- E. Pre-installation Meetings: Conduct pre-installation meeting to verify project requirements, substrate conditions, and installation instructions.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver products in manufacturer's unopened packaging.
- B. Protect and store products in manufacturer's unopened packaging until ready for installation per requirements of AISI's "Code of Standard Practice".

1.8 SEQUENCING

- A. Ensure that products of this section are supplied to affected trades in time to prevent interruption of construction progress.

1.9 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Steeler Inc., which is located at: 10023 Martin Luther King Jr. Way S. ; Seattle, WA 98178; Toll Free Tel: 800-275-2279; Tel: 206-725-2500; Fax: 206-725-1700; Email: [request info \(sales@steeler.com\)](mailto:request info (sales@steeler.com)); Web: www.steeler.com

**** NOTE TO SPECIFIER ** Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.**

- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01 60 00 - Product Requirements.

2.2 MATERIALS

- A. Cold-Formed Steel: Complying with ASTM A653/A653M or ASTM A1003/A1003M

Specifications from Grade 33 to Grade 80 with material thicknesses from 16 mils (0.0166 inches) to 118 mils (0.1180 inches). Grade 33 minimum ($F_y=33$ ksi, yield strength) for thicknesses from 16 to 43 mils. Grade 50 minimum ($F_y=50$ ksi, yield strength) for thicknesses from 54 to 118 mils. For material strength greater than 33 ksi, members shall be marked legibly in the web identifying the material yield strength.

- B. Galvanized Coating: Comply with ASTM A1003/1003M and ASTM A653/A653M. Material thicknesses from 16 to 30 mils have a minimum G40 coating and material thicknesses 33 mils to 118 mils have a minimum G60 coating. G90 coating is a special order and is available for some material thicknesses.
- C. Markings: Provide studs and track with legible and easily read product marking stamped on the web of each section. Repeat marking throughout the length of each member at a maximum spacing of feet on center. Product marking shall include:
 - 1. ICC number, as applicable.
 - 2. Manufacturer's identification.
 - 3. Minimum delivered uncoated steel thickness.
 - 4. Protective coating designator.
 - 5.

5. Web Depth: As indicated on Drawings.
6. Web Depth: 1-5/8 inches (41 mm).
7. Web Depth: 2-1/2 inches (64 mm).
8. Web Depth: 3-5/8 inches (92 mm).
9. Web Depth: 4 inches (102 mm).
10. Web Depth: 5-1/2 inches (140 mm).
11. Web Depth: 6 inches (152 mm).
12. Web Depth: 8 inches (203 mm).
13. Minimum Design Thickness: As indicated on Drawings.

**** NOTE TO SPECIFIER ** Select the metal design thickness required and delete those not required. If more than one is used, identify the application or location for each on the Drawings or on the schedule at the end of this Section.**

14. Minimum Base-Metal Thickness: 0.0179 inches (0.45 mm).
15. Minimum Base-Metal Thickness: 0.0235 inches (0.60 mm).
16. Minimum Base-Metal Thickness: 0.0269 inches (0.68 mm).
17. Minimum Base-Metal Thickness: 0.0296 inches (0.75 mm).

****NOTE TO SPECIFIER** Delete type not required.**

18. Web punched.
19. Web unpunched.

C. Non-Structural Track: Cold-formed galvanized steel T-Members, Steeler drywall runner tracks per ASTM C 645 for conditions indicated below:

****NOTE TO SPECIFIER** Delete size not required.**

1. Flange Length: As indicated on Drawings.
2. Flange Length: 1-1/4 inch (32 mm).
3. Flange Length: 1-1/2 inches (38 mm).
4. Flange Length: 2-0 inches (51 mm).

****NOTE TO SPECIFIER** Delete depths not required.**

7. Web Depth: As indicated on Drawings.
8. Web Depth: 1-5/8 inches (41 mm).
9. Web Depth: 2-1/2 inches (64 mm).
10. Web Depth: 3-1/2 inches (89 mm).
11. Web Depth: 3-5/8 inches (92 mm).
12. Web Depth: 4 inches (102 mm).
13. Web Depth: 5-1/2 inches (140 mm).
14. Web Depth: 6 inches (152 mm).

**** NOTE TO SPECIFIER ** Select the metal design thickness required and delete those not required.**

15. Minimum Design Thickness: As indicated on Drawings.
16. Minimum Base-Metal Thickness: 0.0158 inches (0.40 mm).
17. Minimum Base-Metal Thickness: 0.0179 inches (0.45 mm).
18. Minimum Base-Metal Thickness: 0.0223 inches (0.57 mm).

****NOTE TO SPECIFIER** Delete type not required.**

19. Web punched.
20. Web unpunched.

F. Non-structural Elite Track: STEELER Elite cold-formed galvanized steelTrack, per ASTM C645 for conditions indicated below:

****NOTE TO SPECIFIER** Delete size not required.**

1. Flange Length: As indicated on Drawings.
2. Flange Length: 1-1/4 inches (32 mm).
3. Flange Length: 1-1/2 inches (38 mm).
4. Flange Length: 2 inches (51 mm).
5. Flange Length: As specified on Drawings.
6. Web Depth: Track web to match stud web size.
7. Minimum Base-Metal Thickness: Track thickness to match wall stud thickness or as per design.

****NOTE TO SPECIFIER** Delete type not required.**

8. Web punched.
9. Web unpunched.

**** NOTE TO SPECIFIER ** STEELER Slotted Stud™ and Track - Provides a positive attachment for overall strength and allows for vertical movement caused by normal head-of-wall and floor extension or compression. Select the designation and criteria information based upon the shape and size component required for the project. If more than one, identify the application or location where used or verify the designation and size is indicated on the Drawings. For firewall applications conform to the STEELER UL Head of Wall System for the Classification and Rating required.**

G. Slotted Deflection Studs: STEELER Slotted Stud; cold-formed galvanized steel in conformance with AISI's Specifications for Design of Cold-formed Steel Members. U.L. Classified for both the United States and Canada as Light Gauge Framing in various U.L. Head-Of-Wall Joint Systems.

****NOTE TO SPECIFIER** Delete paragraph not required.**

1. Flange Length: As indicated on Drawings.
2. Flange Length: 1-5/8 inches (41 mm).

****NOTE TO SPECIFIER** Delete depths not required.**

3. Web Depth: As indicated on Drawings.
4. Web Depth: 1-5/8 inches (41 mm).
5. Web Depth: 2-1/2 inches (64 mm).
6. Web Depth: 3-1/2 inches (89 mm).
7. Web Depth: 3-5/8 inches (92 mm).

****NOTE TO SPECIFIER** Delete thickness not required.**

5. Minimum Base-Metal Thickness: 25 gauge, 0.0179 inches (0.45 mm).
6. Minimum Base-Metal Thickness: 24 gauge, 0.0235 inches (0.60 mm).
7. Minimum Base-Metal Thickness: 22 gauge, 0.0269 inches (0.68 mm).
8. Minimum Base-Metal Thickness: 20D gauge, 0.0296 inches (0.75 mm).

J. Z Channel Purlin and Furring: STEELER Z-Members cold-formed galvanized steel:

****NOTE TO SPECIFIER** Delete height not required.**

1. Height: As indicated on the Drawings.
2. Height: 1 inch (25.4 mm).
3. Height: 1-1/4 inches (31.8 mm).
4. Height: 1-1/2 inches (38.1 mm).
5. Height: 2 inches (50.8 mm).
6. Height: 2-1/2 inches (63.5 mm).
7. Height: 3-1/2 inches (88.9 mm).
8. Height: 4 inches (101.6 mm).

****NOTE TO SPECIFIER** Delete thickness not required.**

9. Flange Length: As indicated on Drawings.
10. Flange Length: 1 inch (25.4 mm).
11. Flange Length: 1-1/4 inches (31.75 mm).
12. Flange Length: 1-1/2 inches (38.10 mm).
13. Flange Length: 2 inches (50.80 mm).
14. Flange Length: 2-1/2 inches (63.50 mm).
15. Flange Length: 3 inches (76.20 mm).
16. Flange Length: 3-1/2 inches (88.9 mm).

****NOTE TO SPECIFIER** Delete paragraph not required.**

17. With Lips.
18. Without Lips.

K. U Channel: STEELER U-Members, Cold-formed galvanized steel:

**** NOTE TO SPECIFIER ** Select the designation and criteria information based upon the shape and size component required for the project. If more than one, identify the application or location where used or verify the designation is indicated on the drawings.**

1. U-Channel assembly as indicated on Drawings.

****NOTE TO SPECIFIER** Delete depth not required.**

2. Web Depth: 1/2 inch (13 mm).
3. Web Depth: 7/8 inches (22 mm).
4. Web Depth: 1-1/2 inches (38 mm).

****NOTE TO SPECIFIER** Delete length not required.**

5. Leg Length: As indicated on Drawings.
6. Leg Length: 1/2 inch (13 mm).

****NOTE TO SPECIFIER** Delete thickness not required.**

7. Minimum Base-Metal Thickness: As indicated on Drawings.
8. Minimum Base-Metal Thickness: 20D gauge, 0.0296 inches (0.75 mm).

**** NOTE TO SPECIFIER ** Shaftwall Studs and J Track are used in the construction of shaftwalls and stairwalls. Select the designation and criteria information based upon the shape and size component required for the project. If more than one, identify the application or location where used or verify the designation is indicated on the Drawings.**

L. Shaftwall Studs and Track: STEELER C-H Studs and J-Track, cold-formed galvanized steel, approved for the use intended based on current UL Design Numbers:

****NOTE TO SPECIFIER** Select the designation and criteria information based upon the shape and size component required for the project. UL Certifications are available at**

www.ul.com, or copies are available upon request. If more than one, identify the

1. Galvanized Sheet Steel:

****NOTE TO SPECIFIER** Delete thickness not required.**

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Install cold-formed framing in accordance with requirements of ASTM C0 1 1 0 54.

to strut stud webs with 3/8 inch (10 mm) screws spaced not more than 12 inches (305 mm) o.c., 2 inches (51 mm) above opening head, and not more than 4 inches (102 mm) from overhead J-Runner, using not less than 3 screws per jamb. Install Shaftwall Studs horizontally at not less than 24 inches (610 mm) o.c.; attach to each mitered jamb J-Runner one 3/8 inch (10 mm) screws shaft side and one floor side.

7. Provide additional liner boards, gypsum shims and fillers at elevator door frames as necessary to maintain fire integrity of the tested labeled frame construction. Construct opening in conformance with frame manufacturer's fire test report; secure copy of fire test report from frame manufacturer and maintain on site for elevator inspector.
8. Small openings: Frame openings with CH-Studs or J-Runners at jambs; frame heads and s5